

Serial No. 09/538,396  
Group Art Unit: 1638

**In the Claims:**

Please cancel claims 1 and 9-11 without prejudice.

Please amend claims 2, 3, and 4 as follows:

A4  
Sub D1

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2. (Amended) A recombinant expression cassette, comprising a member of claim 12 operably linked to a promoter.

3. (Amended) A host cell comprising a polynucleotide of claim 12.

4. (Amended) A transgenic plant comprising a recombinant expression cassette comprising a polynucleotide of claim 12.

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Please add new claims 12-15 as follows:

A5  
Sub D3

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12. An isolated polynucleotide encoding a polypeptide with Rad50 activity comprising a polynucleotide selected from the group consisting of:

- (a) a polynucleotide having at least 80% sequence identity over the entire length of the reference sequence, as determined by the GAP program under default parameters, to a polynucleotide of SEQ ID NO: 1;
- (b) a polynucleotide encoding a polypeptide of SEQ ID NO: 2;
- (c) a polynucleotide of SEQ ID NO: 1;
- (d) a polynucleotide which is fully complementary to a polynucleotide of (a), (b), or (c).

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*A  
and I'd  
Sub  
DT >*

*Sub  
B1 >*

13. A polynucleotide amplified from a *Zea mays* nucleic acid library using primers which selectively hybridize, under stringent hybridization conditions, to loci within a polynucleotide of SEQ ID NO: 1, wherein the polynucleotide encodes a polypeptide with Rad50 activity.
14. A polynucleotide which selectively hybridizes, under stringent hybridization conditions and a wash in 0.1X SSC at 60°C, to a polynucleotide of SEQ ID NO: 1.
15. A polynucleotide comprising at least 30 contiguous nucleotides from a polynucleotide of claim 12.